

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 3 and 4 are canceled without prejudice or disclaimer, claims 1, 2, 11, and 18 are currently amended, and claim 21 is newly presented.

1. (Currently Amended) A hot-press cushioning material comprising:

a non-woven fabric formed of a fiber web, ~~characterized in that~~ wherein said fiber web comprises,

a first component having a relatively low softening temperature, and

a second component having a relatively high softening temperature, ~~and~~

wherein said softening temperature of said first component is lower than a hot-press forming temperature of an object to be pressed and said softening temperature of said second component is higher than said hot-press forming temperature of said object to be pressed, and

wherein said non-woven fabric is compressed at a temperature which is not lower than the said softening temperature of the said first component but lower than the said softening temperature of the said second component; and is cooled, while maintaining compression, to a temperature lower than said softening temperature of said first component, such that a solidified state of said first component restrains said second component in a compressed state to maintain an elastic restoring force of said second component.

2. (Currently Amended) A hot-press cushioning material comprising:

a non-woven fabric formed of a fiber web, ~~characterized in that~~ wherein said fiber web comprises,

a first component having a softening temperature lower than a hot-press forming temperature of an object to be pressed, and

a second component having no softening temperature, ~~and~~

wherein said non-woven fabric is compressed at the said softening temperature of the said first component or higher and is cooled, while maintaining compression, to a temperature lower than said softening temperature of said first component, such that a solidified state of said first component restrains said second component in a compressed state to maintain an elastic restoring force of said second component.

3. (Canceled)

4. (Canceled)

5. (Original) The hot-press cushioning material according to claim 1, wherein said first component is a material selected from a group comprising polyethylene, polypropylene, nylon 6, low-melting polyester, acryl, polyvinyl alcohol, and polyphenylene sulfide, and said second component is a material selected from a group comprising nylon polybenzoxazole, polybenzimidazole, polyimide, polyester, polyphenylene sulfide, polytetrafluoroethylene, polyether ether ketone, and phenol.

6. (Original) The hot-press cushioning material according to claim 2, wherein said first component is a material selected from a group comprising polyethylene, polypropylene, nylon 6, low-melting polyester, acryl, polyvinyl alcohol, and polyphenylene sulfide, and said second component is a material selected from a group comprising aromatic polyamide, polyamideimide, polyarylate, metal, carbon, silica, glass, and ceramics.

7. (Original) The hot-press cushioning material according to claim 1, wherein said fiber web is provided such that a first fiber comprising said first component as a main constituent and a second fiber comprising said second component as a main constituent are mixed.

8. (Original) The hot-press cushioning material according to claim 7, wherein a mixture ratio of said first fiber to said second fiber is 5/95 to 70/30 by mass.

9. (Original) The hot-press cushioning material according to claim 7, wherein said first fiber has a core-in-sheath structure consisting of a core part comprising said first component and a coating part comprising said second component.

10. (Original) The hot-press cushioning material according to claim 1, wherein said fiber web comprises a fiber having a core-in-sheath structure consisting of a core part comprising said first component and a coating part comprising said second component.

11. (Currently Amended) The hot-press cushioning material according to claim 1, further comprising:

a woven fabric comprising a component equivalent to said second component,

~~wherein said non-woven fabric is provided such that said fiber web and a said woven fabric are needlepunched together to form said non-woven fabric comprising the equal component as said second component are needlepunched.~~

12. (Original) The hot-press cushioning material according to claim 1, comprising a surface coating material laminated on said non-woven fabric.

13. (Original) A manufacturing method of a hot-press cushioning material comprising a compressed non-woven fabric, comprising:

- a step of preparing a non-woven fabric made of a fiber web comprising a thermoplastic first component having a softening temperature and a heat-resistant second component having a softening temperature higher than the softening temperature of said first component or having no softening temperature;
- a step of compressing said non-woven fabric at the softening temperature of said first component or higher;
- a step of cooling said non-woven fabric to a temperature lower than the softening temperature of said first component in a compressed state; and
- a step of releasing the compressed state of said non-woven fabric after cooled.

14. (Original) The manufacturing method of the hot-press cushioning material according to claim 13, wherein said fiber web is provided such that a first fiber comprising said first component as a main constituent and a second fiber comprising said second component as a main constituent are mixed.

15. (Original) The manufacturing method of the hot-press cushioning material according to claim 14, wherein a mixture ratio of said first fiber to said second fiber is 5/95 to 70/30 by mass.

16. (Original) The manufacturing method of the hot-press cushioning material according to claim 14, wherein said first fiber has a core-in-sheath structure consisting of a core part comprising said first component and a coating part comprising said second component.

17. (Original) The manufacturing method of the hot-press cushioning material according to claim 13, wherein said fiber web comprises a fiber having a core-in-sheath structure consisting of a core part comprising said first component and a coating part comprising said second component.

18. (Currently Amended) The manufacturing method of the hot-press cushioning material according to claim 13, wherein ~~said non-woven fabric is provided such that~~ said fiber web and a woven fabric are needlepunched together to form said non-woven fabric, said woven fabric comprising the equal a component as equivalent to said second component are needlepunched.

19. (Original) The manufacturing method of the hot-press cushioning material according to claim 13, wherein a surface coating material is laminated on said non-woven fabric to be integrated.

20. (Original) A manufacturing method of a laminated board comprising a step of heating and pressurizing the laminated board with a flat-plate cushioning material interposed between the laminated board and heating and pressurizing means, characterized in that said cushioning material is the hot-press cushioning material according to claim 1.

21. (New) A hot-press cushioning material according to claim 1, wherein when said non-woven fabric is compressed, said non-woven fabric is compressed from a first predetermined thickness to a second predetermined thickness, such that after said non-woven fabric is cooled and compression is released, said non-woven fabric is of a third predetermined thickness, said third predetermined thickness being less than said first predetermined thickness and greater than or equal to said second predetermined thickness.